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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,559	03/03/2006	Akitoshi Mori	39858	9963

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PEARNE & GORDON LLP  
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CLEVELAND, OH 44114-3108

EXAMINER
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JAMAL, ALEXANDER

ART UNIT	PAPER NUMBER
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2614

NOTIFICATION DATE	DELIVERY MODE
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04/06/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patdocket@pearne.com  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/570,559	<b>Applicant(s)</b> MORI ET AL.	
	<b>Examiner</b> ALEXANDER JAMAL	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Amendment*

1. Based upon the submitted amendment, the examiner notes that claims 1,2,11,12 have been amended and claim 4 has been cancelled.

### *Specification*

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claim 2** is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The geographic shape of the displayed contents being determined to correspond to operable directions on the display unit critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

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It is not clear what problem applicant is solving with the claimed invention. The claim states to design a display in order to properly display the menu items which are going to be used on said display. Applicant's background section states that there is a known problem in phone that the operation key used to navigate the menu items is restricted (bottom of page 3 of spec.) This contradicts what is stated on the bottom of page 1 of the spec, that known prior art phone uses buttons with 4 directions used to navigate to areas on the phone display are 'restricted'.

It is not clear how the prior art buttons are 'restricted' and further, it is not clear specifically how applicant enabling one to design the geometrical shape of the menu to fit the useable directions of the display is any different than designing a menu to work within a predefined system. For the purpose of examination, the examiner assumes applicant is claiming the very obvious step of designing a menu to work with the known parameters of the system which it is being designed to work on. Any person skilled in the art would know to design the menus to be completely accessible on the system for which they are going to be used.

Appropriate correction/clarification is requested.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-6,11-13,16-19** rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (US 20040121816 A1), and further in view of Silverstone (4185281).

As per **claim 1**, Yang discloses a cell phone with a center button that comprises 9 other directional buttons used to navigate the phone interface via a display (inherently requires a display and operating unit). The overall system comprises a controlling unit and operating unit to perform the disclosed functions, including navigating, or changing the display based on the button input (sensed result) (abstract). The buttons are used to navigate menu on a display (fig. 1,abstract), as such the display contents will be changed based on a 'controlling unit' and 'operating unit' (inherently required to interface the disclosed button with the cell phone). The examiner further notes that a 'controlling unit' and an 'operating unit' are inherently required in order to interface any user input devices used with any cell phone. The act of navigating a menu will occur at the speed that the various button positions are actuated (at a speed that corresponds with the rate at which the user operates the button). This true of any input device which allows a user to navigate a menu. A cell phone has a keypad area that can be covered by the average human hand. However, the system does not specify that the operating unit detects an operation direction and speed in order to interact with the phone interface.

Silverstone teaches that concentric selecting wheels may be used in a data device to provide various navigating functions, including 'horizontal' and 'vertical' interaction with the data display (fig. 1). Silverstone teaches that this provides ease of use and

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convenient 'one-handed' operation (Col 1 lines 1-40). The dials sense pressure because pressure must be applied in order to actuate the dials. The system inherently comprises an operating unit that detects the speed and direction of the dials in order to control the hardware. Each measurable turn of the dial will produce a change in the selected data on the display. The selected data will change at the same speed (detected speed) of the dial turning. It would have been obvious to one of ordinary skill in the art at the time of this application that any number of known navigation types could be designed to provide convenient ease of use and one hand operation, including a center button and concentric dials.

As per **claim 2**, it would have been obvious to one skilled in the art to design the menu interface to be completely accessible in the display of the device in which it was going to be used.

As per **claims 3,4,6,17,19**, they are rejected as per the claim 1 rejection.

As per **claim 5**, the button/dial interface will act to interface with any particular menu application that is running on the cell phone. The button/dials will 'switch' to interact with the currently displayed menu or application.

As per **claims 11** button presses and dial actuations sense pressure.

As per **claim 12**, it would have been obvious to give the buttons enough clearance to be individually actuated as intended.

As per **claim 13**, each button is coupled to a different point in the circuit (has a different operating load).

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As per **claims 16,18**, it would have been obvious that arbitrary button shapes and materials (including differing shapes/materials, known shapes concave/convex and materials ) could be used as a matter of design choice.

4. **Claims 7** rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (US 20040121816 A1) in view of Silverstone (4185281) as applied to claim 1, and further in view of Itoh (US 20020015102 A1).

As per **claim 7**, Yang in view of Silverstone discloses a mobile phone with various buttons and concentric jog-dials, but do not specify every function possible by the dials in terms of a specific application (such as zooming). Itoh discloses a cellphone with a jog-dial where the dial controls the zooming for a picture application in the phone (para. 44).

5. **Claims 9,10**, rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (US 20040121816 A1) in view of Silverstone (4185281) as applied to claim 1, and further in view of Nokia (EP 463856 A).

As per **claims 9,10**, Yang and Silverstone disclose the concentric dials but do not disclose how each turn (speed and direction) of the dial are determined.

Nokia teaches a means to digitally monitor (via predetermined times) the speed and direction (a circular tracing operation) of a dial in a cellphone (abstract). It would

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have been obvious to one of ordinary skill in the art at the time of this application to implement a speed and direction sensing system of Nokia in order to interact with the menu/application items on the display.

6. **Claims 14-15** rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (US 20040121816 A1) in view of Silverstone (4185281) as applied to claim 1, and further in view of Oono et al. (EP 463856 A).

As per **claims 14-15**, Yang and Silverstone disclose the buttons but do not disclose every single component associated with the buttons.

Oono teaches to use a rubber (elastic, inherently buffering) substrate to support and hold the buttons and keys on a keyboard in place. It would have been obvious to one of ordinary skill in the art at the time of this application to implement a rubber substrate to hold the buttons and keys of the phone keyboard in place.

### ***Response to Arguments***

1. Applicant's arguments have been fully considered but they are not persuasive.

As per applicant's comment that claim 2 has been amended to obviate the rejection, the examiner disagrees and notes the 112 first paragraph rejection to claim 2 above.

As per applicant's comments regarding the 112 rejection to claims 11-15, the examiner withdraws the 112 rejection to those claims.



As per applicant's arguments that Yang does not disclose an input device that 'detects pressure around the operation button diameter', the examiner disagrees. Applicant states that Yang merely provides a joystick, and Silverstone provides knobs. The examiner notes that both a knob and a joystick respectively detect pressure around their diameters because pressure around the diameters is required to actuate each of those input mechanisms.

As per applicant's comments that the speed of actuation does not correspond to the speed of change on the display, the examiner disagrees. The prior art discloses input devices that can be used to navigate a menu. The speed at which the button or dial is actuated will directly correspond to the speed that the menu is navigated, and hence, the speed at which the display is changed (via an operating and control unit). Every digital system requires timing in order to synchronize the system. This timing will be applied to the input buttons/knobs as well. The actuation of the button will be timed by the clocking interface and the rest of the system will respond to the input (in synchronization with a system clock).

As per applicant's arguments that one cannot put a joystick around a button, the examiner notes that Yang teaches a button that may be actuated to provide different outputs. Silverstone teaches implementing concentric dials as an input source. The two devices could easily be combined with the buttons of Yang implemented in the middle of the concentric dials disclosed by Silverstone.

As per applicant's arguments that the prior art does not disclose the timing of the button/knob actuations, the examiner disagrees. Every digital system requires timing in

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order to synchronize the system. This timing will be applied to the input buttons/knobs as well. The actuation of the button will be timed by the clocking interface and the rest of the system will respond to the input (in synchronization with a system clock).

As per applicant's argument that Yang discloses a joystick and not concentric buttons, the examiner disagrees. The input 'joystick' (as named by applicant) comprises concentric buttons. Each direction is distinctly and independently activated and as such is a separate button. The concentric buttons of Yang could be placed inside the concentric knobs of Silverstein. The examiner further contends it would have been obvious to rearrange the buttons and knobs in many different configurations as a matter of design choice. The examiner reads the navigational key of Yang as comprising concentric buttons. Yang further discloses the traditional concentric buttons (abstract) used to navigate a menu.

As per applicant's arguments that a joystick's length would inhibit operation of peripheral buttons, the examiner disagrees and notes that Yang is not limited to any particular length of protrusion on the navigational key and a user could still easily actuate knobs over the key. Yang is not disclosing airplane flight sticks, he is disclosing a navigational key used on a cell phone.

As per applicant's arguments that Yang and Silverstein do not disclose analogous art, the examiner disagrees. Applicant states that Silverstone is directed to a device used in the aviation industry. The examiner notes col. 1 lines 1-3 of Silverstone which state that the device is for display arrangements suited for use with a data interface. This is exactly what Yang is disclosing.

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Jamal whose telephone number is 571-272-7498. The examiner can normally be reached on M-F 9AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A Kuntz can be reached on 571-272-7499. The fax phone numbers for the organization

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where this application or proceeding is assigned are **571-273-8300** for regular communications and **571-273-8300** for After Final communications.

/Alexander Jamal/

Primary Examiner, Art Unit 2614

Examiner Alexander Jamal

April 2, 2009